

2.4.3.2.7.3.3.1 Verification of “CC_4” Subfield in Aircraft Operational Status Message (subparagraph 2.2.3.2.7.3.3.1, 2.2.5.1.35)

Purpose/Identification:

The “CC_4” subfield is a 4-bit field (Message Bits 41 through 44, ME Bits 9 through 12) used to indicate En Route Operational Capabilities of the ADS-B transmitting system to other aircraft.

Measurement Procedure:

Configure the ADS-B Transmitting System to transmit Aircraft Operational Status Messages. Verify that the input to the unit under test indicates that the TCAS and CDTI units are fully operational. ~~Discontinue the TCAS input so that the status is “NOT Operational.”~~ Discontinue the CDTI input so that the status is “Not Operational” or the status of CDTI is “unknown.” Verify that the “CC_4” Subfield is correctly set to ~~ALL ZEROs~~ (binary ~~00001000~~), in Message Bits 41 through 44.

Reinstate the input that indicates that there is a valid CDTI unit available and that it is fully operational. Verify that the “CC_4” Subfield is correctly set to binary ~~000~~0101, in Message Bits 41 through 44.

~~Discontinue~~ Reinstate the input that indicates that there is a valid TCAS unit available. Discontinue the CDTI input so that the status is “Not Operational” or the status of CDTI is “unknown.” Verify that the “CC_4” Subfield is correctly set to binary ~~001~~00110, in Message Bits 41 through 44.

Input data that indicates that the CDTI unit is fully operational and that the TCAS unit is ~~not~~ operational. Verify that the “CC_4” Subfield is correctly set to binary ~~001~~0111, in Message Bits 41 through 44.

Only four (4) of the possible sixteen (16) combinations for the use of the “CC_4” Subfield, Message Bits 41 through 44, have been established at this time. Once such meanings are defined, appropriate test procedures will be added to this document in order to verify the settings of the Capability Class subfields.

2.4.3.2.7.3.3.2 Verification of “CC_3” Subfield in Aircraft Operational Status Messages (subparagraph 2.2.3.2.7.3.3.2, 2.2.5.1.36)

Purpose/Identification:

The “CC_3” subfield is a 4-bit field (Message Bits 45 through 48, ME Bits 13 through 16) used to indicate Terminal Area Operational Capabilities of the ADS-B transmitting system to other aircraft.

Measurement Procedure:

The meanings of each of the Capability Class subfields have yet to be defined. Once such meanings are defined, appropriate test procedures will be added to this document in order to verify the settings of the Capability Class subfields.